

Claims

What is claimed is:

1. A cylinder block for an internal combustion engine, comprising:
  - at least one cylinder bore;
  - a coolant jacket at least partially surrounding the at least one cylinder bore;
  - a top deck; and
  - first and second longitudinally opposed end walls, each of the first and second end walls having a substantially planar end wall surface arranged on respective first and second planes;
  - wherein the coolant jacket includes a first portion located between the first end wall and the at least one cylinder bore, and a second portion located between the second end wall and the at least one cylinder bore; and
  - wherein at least one of the first and second end walls includes a projecting portion adjacent the top deck which projects longitudinally beyond the first or second plane.
2. The cylinder block of Claim 1, wherein each of the first and second end walls includes a projecting portion adjacent the top deck which projects longitudinally beyond the respective first or second plane
3. The cylinder block of Claim 2, wherein the projecting portions have first and second vertical depths, respectively, and the first and second portions of the coolant jacket have a third vertical depth, and neither of the first or second depths substantially exceeds the third vertical depth of the coolant jacket.

4. The cylinder block of Claim 2, wherein the first and second coolant jacket portions are located at least partially within the projecting portions.

5. The cylinder block of Claim 3, wherein the first and second coolant jacket portions are located at least partially within the projecting portions.

6. The cylinder block of Claim 1, wherein at least part of each of the first and second coolant jacket portions are co-planar with the first and second planes, respectively.

7. The cylinder block of Claim 2, wherein at least part of each of the first and second coolant jacket portions are co-planar with the first and second planes, respectively.

8. The cylinder block of Claim 3, wherein at least part of each of the first and second coolant jacket portions are co-planar with the first and second planes, respectively.

9. The cylinder block of Claim 4, wherein at least part of each of the first and second coolant jacket portions are co-planar with the first and second planes, respectively.

10. The cylinder block of Claim 1, wherein said first and second coolant jacket portions have an upper width, a lower width and an intermediate width, and wherein at least one of the first and second coolant jacket portions has an intermediate width which is greater than its upper and lower widths.

11. The cylinder block of Claim 2, wherein said first and second coolant jacket portions have an upper width, a lower width and an intermediate

width, and wherein at least one of the first and second coolant jacket portions has an intermediate width which is greater than its upper and lower widths.

12. The cylinder block of Claim 3, wherein said first and second coolant jacket portions have an upper width, a lower width and an intermediate width, and wherein at least one of the first and second coolant jacket portions has an intermediate width which is greater than its upper and lower widths.

13. The cylinder block of Claim 4, wherein said first and second coolant jacket portions have an upper width, a lower width and an intermediate width, and wherein at least one of the first and second coolant jacket portions has an intermediate width which is greater than its upper and lower widths.

14. The cylinder block of Claim 6, wherein said first and second coolant jacket portions have an upper width, a lower width and an intermediate width, and wherein at least one of the first and second coolant jacket portions has an intermediate width which is greater than its upper and lower widths.

15. The cylinder block of Claim 1, wherein the at least one cylinder bore is a linerless cylinder bore.

16. The cylinder block of Claim 1, wherein the block comprises at least two cylinder bores, the bores having conjoined cylinder walls.

17. The cylinder block of Claim 1, wherein the projecting portions are curved projections.

18. A cylinder block for an internal combustion engine, the cylinder block including an upper part and a lower part, the upper part comprising:

at least one cylinder bore;

a coolant jacket at least partially surrounding the at least one cylinder bore;

a top deck; and

first and second longitudinally opposed end walls, each of the first and second end walls having a substantially planar end wall surface arranged on respective first and second planes;

wherein the coolant jacket includes a first portion located between the first end wall and the at least one cylinder bore, and a second portion located between the second end wall and the at least one cylinder bore; and

wherein at least one of the first and second end walls includes a projecting portion adjacent the top deck which projects longitudinally beyond the first or second plane.

19. The cylinder block of Claim 18, wherein each of the first and second end walls includes a projecting portion adjacent the top deck which projects longitudinally beyond the respective first or second plane

20. The cylinder block of Claim 19, wherein the projecting portions have first and second vertical depths, respectively, and the first and second portions of the coolant jacket have a third vertical depth, and neither of the first or second depths substantially exceeds the third vertical depth of the coolant jacket.